



I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: April 4, 2007 Signature: Joyce Dotson (Joyce Dotson)

Docket No.: 337348055US1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Sheffield et al.

Application No.: 10/731,892

Confirmation No.: 4677

Filed: December 9, 2003

Art Unit: 3766

For: METHODS FOR TREATING AND/OR  
COLLECTING INFORMATION  
REGARDING NEUROLOGICAL  
DISORDERS, INCLUDING LANGUAGE  
DISORDERS

Examiner: J. L. Reidel

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

04/06/2007 BABRAHA1 00000029 10731892

01 FC:1806

180.00 US

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information that may be material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition, applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0665, under Order No. 337348055US1.

Dated: April 3, 2007

Respectfully submitted,

By 

John M. Wechkin

Registration No.: 42,216

PERKINS COIE LLP

P.O. Box 1247

Seattle, Washington 98111-1247

(206) 359-8000

(206) 359-7198 (Fax)

Attorney for Applicant



PTO/SB/08a/b (07-06)

Approved for use through 09/30/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/731,892-Conf. #4677
				Filing Date	December 9, 2003
				First Named Inventor	W. D. Sheffield
				Art Unit	3766
				Examiner Name	J. L. Reidel
Sheet	1	of	10	Attorney Docket Number	337348055US1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		10/583,630	6/20/2006	Lozano	
		11/254,060	10/19/2005	Wyler	
		11/254,240	10/19/2005	Wyler	
		11/255,187	10/19/2005	Firlik	
		11/344,453	1/30/2006	Gliner	
		11/518,139	9/7/2006	Weinand	
		11/583,349	10/18/2006	Sloan	
		11/638,326	12/12/2006	Gliner et al.	
		US-2003-0074032	4/17/2003	Gliner	
		US-2003-0078633	4/24/2003	Firlik et al.	
		US-2003-0088274	5/8/2003	Gliner et al.	
		US-2003-0097161	5/22/2003	Firlik et al.	
		US-2003-0114886	6/19/2003	Gluckman et al.	
		US-2003-0125786	7/3/2003	Gliner et al.	
		US-2003-0130706	7/10/2003	Sheffield et al.	
		US-2003-0176901	9/18/2003	May	
		US-2004-0073270	4/15/2004	Firlik et al.	
		US-2004-0088024	5/6/2004	Firlik et al.	
		US-2004-0092809	5/13/2004	DeCharms	
		US-2004-0102828	5/27/2004	Lowry et al.	
		US-2004-0111127	6/10/2004	Gliner et al.	
		US-2004-0131998	7/8/2004	Marom et al.	
		US-2004-0138550	7/15/2004	Hartlep et al.	
		US-2004-0176831	9/9/2004	Gliner et al.	
		US-2004-0181263	9/16/2004	Balzer et al.	
		US-2004-0236388	11/25/2004	Gielen et al.	
		US-2004-0249422	12/9/2004	Gliner et al.	
		US-2005-0004620	1/6/2005	Singhal et al.	
		US-2005-0015129	1/20/2005	Mische	
		US-2005-0021104	1/27/2005	DiLorenzo	
		US-2005-0021105	1/27/2005	Firlik et al.	
		US-2005-0021106	1/27/2005	Firlik et al.	
		US-2005-0021107	1/27/2005	Firlik et al.	
		US-2005-0021118	1/27/2005	Genau et al.	
		US-2005-0070971	3/31/2005	Fowler et al.	
		US-2005-0075679	4/7/2005	Gliner et al.	
		US-2005-0075680	4/7/2005	Lowry et al.	
		US-2005-0096701	5/5/2005	Donovan et al.	
		US-2005-0113882	5/26/2005	Cameron et al.	
		US-2005-0119712	6/2/2005	Shafer	
		US-2005-0154425	7/14/2005	Boveja et al.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	2	of	10	Attorney Docket Number	337348055US1

	US-2005-0154426	7/14/2005	Boveja et al.	
	US-2005-0182453	8/18/2005	Whitehurst	
	US-2006-0015153	1/19/2006	Gliner et al.	
	US-2006-0106430	5/18/2006	Fowler et al.	
	US-2006-0106431	5/18/2006	Wylar et al.	
	US-2006-0129205	6/15/2006	Boveja et al.	
	US-2006-0173522	8/3/2006	Osorio	
	US-2006-0217782	9/28/2006	Boveja et al.	
	US-2716226	8/23/1955	Jonas	
	US-2721316	10/18/1955	Shaw	
	US-3628193	12/21/1971	Collins	
	US-3918461	11/11/1975	Cooper	
	US-4030509	6/21/1977	Heilman et al.	
	US-4125116	11/14/1978	Fischell	
	US-4214804	7/29/1980	Little	
	US-4245645	1/20/1981	Picard et al.	
	US-4308868	1/5/1982	Jhabvala	
	US-4328813	5/11/1982	Ray	
	US-4340038	7/20/1982	McKean	
	US-4474186	10/2/1984	Ledley et al.	
	US-4590946	5/27/1986	Loeb	
	US-4702254	10/27/1987	Zabara	
	US-4969468	11/13/1990	Byers et al.	
	US-5024226	6/18/1991	Tan	
	US-5063932	11/12/1991	Dahl et al.	
	US-5121754	6/16/1992	Mullett	
	US-5184620	2/9/1993	Cudahy et al.	
	US-5193540	3/16/1993	Schulman et al.	
	US-5271417	12/21/1993	Swanson et al.	
	US-5282468	2/1/1994	Klepinski	
	US-5299569	4/5/1994	Wernicke et al.	
	US-5303705	4/19/1994	Nenov	
	US-5314458	5/24/1994	Najafi et al.	
	US-5405375	4/11/1995	Ayers et al.	
	US-5406957	4/18/1995	Tansey	
	US-5464446	11/7/1995	Dreessen et al.	
	US-5520190	5/28/1996	Benedict et al.	
	US-5522864	6/4/1996	Wallace et al.	
	US-5540734	7/30/1996	Zabara	
	US-5562708	10/8/1996	Combs et al.	
	US-5601611	2/11/1997	Fayram et al.	
	US-5611350	3/18/1997	John	
	US-5618531	4/8/1997	Cherksey	
	US-5674251	10/7/1997	Combs et al.	
	US-5676655	10/14/1997	Howard, III et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	3	of	10	Attorney Docket Number	337348055US1

	US-5707334	1/13/1998	Young	
	US-5750376	5/12/1998	Weiss et al.	
	US-5769778	6/23/1998	Abrams et al.	
	US-5772591	6/30/1998	Cram	
	US-5782873	7/21/1998	Collins	
	US-5824030	10/20/1998	Yang et al.	
	US-5865842	2/2/1999	Knuth et al.	
	US-5871517	2/16/1999	Abrams et al.	
	US-5916171	6/29/1999	Mayevsky	
	US-6035236	3/7/2000	Jarding et al.	
	US-6040180	3/21/2000	Johe	
	US-6057846	5/2/2000	Sever, Jr.	
	US-6095148	08/01/2000	Shastri et al.	
	US-6176242	1/23/2001	Rise	
	US-6190893	2/20/2001	Shastri et al.	
	US-6198958	3/6/2001	Ives et al.	
	US-6205360	3/20/2001	Carter et al.	
	US-6210417	4/3/2001	Baudino et al.	
	US-6221908	4/24/2001	Kilgard et al.	
	US-6230049	5/8/2001	Fischell et al.	
	US-6236892	5/22/2001	Feler	
	US-6246912	6/12/2001	Sluiter et al.	
	US-6280462	8/28/2001	Hauser et al.	
	US-6301493	10/9/2001	Marro et al.	
	US-6319241	11/20/2001	King et al.	
	US-6339725	1/15/2002	Naritoku et al.	
	US-6356792	3/12/1992	Errico et al.	
	US-6375666	4/23/2002	Mische	
	US-6405079	6/11/2002	Ansarinia	
	US-6418344	7/9/2002	Rezai	
	US-6456886	9/24/2002	Howard, III et al.	
	US-6464356	10/15/2002	Sabel et al.	
	US-6484059	11/19/2002	Gielen	
	US-6487450	11/26/2002	Chen	
	US-6499488	12/31/2002	Hunter et al.	
	US-6505075	1/7/2003	Weiner	
	US-6507755	1/14/2003	Gozani et al.	
	US-6529774	3/4/2003	Greene	
	US-6539263	3/25/2003	Schiff et al.	
	US-6556868	4/29/2003	Naritoku et al.	
	US-6569654	5/27/2003	Shastri et al.	
	US-6591138	7/08/2003	Fischell et al.	
	US-6597954	7/22/2003	Pless et al.	
	US-6615065	9/2/2003	Barrett et al.	
	US-6633780	10/14/2003	Berger	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	4	of	10	Attorney Docket Number	337348055US1

	US-6647296	11/11/2003	Fischell et al.	
	US-6665562	12/16/2003	Gluckman et al.	
	US-6684105	1/27/2004	Cohen et al.	
	US-6708064	3/16/2004	Rezai	
	US-6725094	4/20/2004	Saberski	
	US-6731978	5/4/2004	Olsen et al.	
	US-6764498	7/20/2004	Mische	
	US-6782292	8/24/2004	Whitehurst	
	US-6788975	9/7/2004	Whitehurst et al.	
	US-6795737	9/21/2004	Gielen et al.	
	US-6810286	10/26/2004	Donovan et al.	
	US-6839594	1/4/2005	Cohen et al.	
	US-6873872	3/29/2005	Gluckman et al.	
	US-6892097	5/10/2005	Holsheimer	
	US-6895280	5/17/2005	Meadows et al.	
	US-6907296	6/14/2005	Doan et al.	
	US-6934580	8/23/2005	Osorio et al.	
	US-6944501	9/13/2005	Pless	
	US-6990377	1/24/2006	Gliner et al.	
	US-7006859	2/28/2006	Osorio et al.	
	US-7024247	4/4/2006	Gliner et al.	
	US-7065412	10/28/2004	Swoyer	
	US-7107104	9/12/2006	Keravel et al.	
	US-7107097	9/12/2006	Stern et al.	
	US-7149586	12/12/2006	Greenberg et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		DE 19750043	05-20-1999	Bartha et al.		
		EP 0214527	03-18-1987	Minnesota Mining and Manufacturing Company		
		EP 0319844	06-14-1989	Ad-Tech Medical Instrument Corp.		
		EP 1180056	11-12-2003	Exogen, Inc.		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	5	of	10	Attorney Docket Number	337348055US1

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
		BARR, Deborah et al., "Induction and Reversal of Long-Term Potentiation by Low-and High-Intensity Theta Pattern Stimulation," The Journal of Neuroscience, 15(7): pages 5402-5410 (July 1995).		
		BARRES et al., "Proliferation of oligodendrocyte precursor cells depends on electrical activity in axons," Nature; Medical Research Council Developmental Neurobiology Programme, Department of Biology, University College, London, p. 258-260, (January 21, 1993).		
		BEHRENS, T. et al., "Non-invasive mapping of connections between human thalamus and cortex using diffusion imaging," Nature neuroscience, Vol. 6 No. 7, pp. 750-757 (July 2003).		
		BEVERIDGE, J. A., "Use of Exogenous Electric Current in the Treatment of Delayed Lesions in Peripheral Nerves," Plastic and Reconstructive Surgery, October 1988, Vol. 82, No. 4, pages 573-579.		
		BEZARD et al., "Cortical Stimulation and Epileptic Seizure: A Study of the Potential Risk in Primates," Neurosurgery, Vol. 45, No. 2, August 1999, 346-350.		
		BLUESTONE, Avraham Y. et al., "Three-dimensional optical tomography of hemodynamics in the human head," Optics Express, Vol. 9, No. 6, pp: 272-286 (September 10, 2001).		
		Brain Electrical Stimulation to Enhance Recovery After Stroke, ClinicalTrials.gov, URL: <a href="http://www.clinicaltrials.gov/ct/show/NCT00085657?order=2">http://www.clinicaltrials.gov/ct/show/NCT00085657?order=2</a> [Retrieved on 12-22-2005].		
		BURNETT, Mark G. et al., "Diffuse optical measurement of blood flow, blood oxygenation, and metabolism in a human brain during sensorimotor cortex activation," Optics Letters, Vol. 29, No. 15, pp: 1766-1768 (August 1, 2004).		
		BURY, Scott et al., "The Effects of Behavioral Demand on Motor Cortical and Cerebellar Structural Plasticity After Brain Injury in Adult Rats," <a href="http://www.mcmaster.ca-inabis98-schallert-bury0827-two.html#introduction">http://www.mcmaster.ca-inabis98-schallert-bury0827-two.html#introduction</a> , 2 pages [Retrieved on March 1, 2003].		
		CHEUN et al., "Differentiation of a Stem Cell Line Toward a Neuronal Phenotype," Int. J. Devl. Neuroscience, Vol. 9, No. 4, pp. 391-404 (1991).		
		CICINELLI et al., "Transcranial magnetic stimulation reveals an interhemispheric asymmetry of cortical inhibition in focal epilepsy," Neurophysiology, Vol. 11, No. 4 March 20, 2000, pages 701-707.		
		CINCOTTA et al., "Suprathreshold 0.3 Hz repetitive TMS prolongs the cortical silent period: potential implications for therapeutic trials in epilepsy," Clinical Neurophysiology, Volume 114, 2003, Pages 1827-1833, Elsevier Ireland Ltd.		
		CNN.com, Health, "Lab Zaps Strokes with Magnetic Pulses," <a href="http://www.cnn.com/2004/HEALTH/conditions/11/29/zapping.strokes.ap/">http://www.cnn.com/2004/HEALTH/conditions/11/29/zapping.strokes.ap/</a> , Nov. 29, 2004, 4 pages [Retrieved on 12-02-2004].		
		CRAMER et al., "Use of Functional MRI to Guide Decisions in a clinical Stroke Trial," Stroke, Journal of the American Heart Association, May 2005, pages e50-e52, American Heart Association, Dallas TX.		
		Cytokines Web Clinical Significance, Cytokines Web, 2 pages, URL: <a href="http://cmbi.bjmu.edu.cn-cmbidata-cgf-CGF_Database-cytweb-roles-index.html">http://cmbi.bjmu.edu.cn-cmbidata-cgf-CGF_Database-cytweb-roles-index.html</a> [Retrieved on 9-2-2005].		
		DE RIDDER, Dirk et al., "Magnetic and electrical stimulation of the auditory cortex for intractable tinnitus," Journal Neurosurg., Vol. 100, pp: 560-564, (March 2004).		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	6	of	10	Attorney Docket Number	337348055US1

	DI LAZZARO, V. et al., "Theta-burst repetitive transcranial magnetic stimulation suppresses specific excitatory circuits in the human motor cortex," Physiology in Press; published online on April 21, 2005 as 10.1113-jphysiol.2005.087288.	
	DING, Yuemin et al., "Neural Plasticity After Spinal Cord Injury," Current Pharmaceutical Design Vol. 11, No. 11, pp: 1441-1450, Abstract Only, 1 page (April 2005).	
	DUNCAN, Pamela W. et al., "Defining post-stroke recovery: implications for design and interpretation of drug trials," Neuropharmacology Vol. 39, pp. 835-841 (2000).	
	FERRARI, A. et al., "Immature human NT2 cells grafted into mouse brain differentiate into neuronal and glial cell types," FEBS Letters, Dec. 8, 2000, Pages 121-125, Volume 486, No. 2, Elsevier Science B.V., Amsterdam.	
	FREGNI et al., "Antiepileptic Effects of Repetitive Transcranial Magnetic Stimulation in Patients with Cortical Malformations: An EEG and Clinical Study," ASSFN Proceedings 2004, Stereotactic and Functional Neurosurgery, 2005, 83:57-62.	
	FREGNI, Felipe et al., "Anodal Transcranial Direct Current Stimulation of Prefrontal Cortex Enhances Working Memory," Experimental Brain Research Vol. 166, No. 1, pp: 23-30 (September 2005).	
	HAGEMANN, Georg et al., "Increased Long-Term Potentiation in the Surround of Experimentally Induced Focal Cortical Infarction," Annals of Neurology, Vol. 44, No. 2, pages 255-258 (August 1998).	
	HAGLUND, Michael M. et al., "Optical imaging of epileptiform and functional activity in human cerebral cortex," Nature, August 20, 1992, pages 668-671, Vol. 358, Nature Publishing Group.	
	HAYAKAWA, Toshiji et al., "Changes in Cerebral Oxygenation and Hemodynamics During Obstructive Sleep Apneas," Chest, Vol. 109, pages 916-921 (1996).	
	HOSHI, Yoko et al., "Detection of dynamic changes in cerebral oxygenation coupled to neuronal function during mental work in a man," Neuroscience Letters, Vol. 150, pp: 5-8 (1993).	
	HOSHINO et al., "Application of multichannel near-infrared spectroscopic topography to physiological monitoring of the cortex during cortical mapping: technical case report," Surgical Neurology, Vol. 64, pp. 272-275 (2005).	
	How Imagent™ Works. ISS Inc., <a href="http://www.iss.com-Products-imagent_fmri.html">http://www.iss.com-Products-imagent_fmri.html</a> , 1 page [Retrieved on 10-14-2005].	
	HUANG, Ying-Zu et al., "Theta Burst Stimulation of the Human Motor Cortex," Neuron, Vol. 45, pp. 201-206 (January 20, 2005).	
	HUMMEL, Friedhelm et al., "Effects of non-invasive cortical stimulation on skilled motor function in chronic stroke," Brain Advance Access, pp 1-10, (January 5, 2005).	
	Imagent™ Functional Brain Imaging System, ISS, Inc., <a href="http://www.iss.com-Products-imagent.html">http://www.iss.com-Products-imagent.html</a> , 2 pages [Retrieved on 10-14-2005].	
	Imagent™ functional Near Infrared Imaging System (fNIRS) Brain Imaging Using Infrared Photons, ISS Inc., <a href="http://www.iss.com-products-imagent-Imagent.pdf">http://www.iss.com-products-imagent-Imagent.pdf</a> , 8 pages [Retrieved on 10-14-2005].	
	ISHIBASHI, Tomoko et al., "Astrocytes Promote Myelination in Response to Electrical Impulses," Neuron 49, pp. 823-832, (March 16, 2006).	
	JANICEK, Milos J. et al., "Dynamic Infrared Imaging of Newly Diagnosed Malignant Lymphoma Compared with Gallium-67 and Fluorine-18 Fluorodeoxyglucose (FDG) Positron Emission Tomography," Technology in Cancer Research and Treatment, Vol. 2, No. 6, pp: 571-577 (December 2003).	

Examiner Signature	Date Considered
--------------------	-----------------



Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
			Attorney Docket Number	337348055US1	
Sheet	7	of	10		

	KELLY-SPRATT, K. "Transfection of PC-12 cells: a model system for primary neuronal cells," Qiagen News, Customer application article, www.qiagen.com, Issue 4, 1998, 2 pages.	
	KEYVANI, Kathy et al., "Suppression of proteasome C2 contralateral to ischemic lesions in rat brain," Brain Research, Vol. 858, pp: 386-392, 2000.	
	KILGARD, MICHAEL et al., "Cortical Map Reorganization Enabled by Nucleus Basalis Activity," Science, Vol. 279 pp 1714-1717 (March 13, 1998).	
	KIMURA, K. et al., "Electrically induced neurite outgrowth of PC12 cells on the electrode surface," Entrez PubMed, <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&amp;cmd=Retrieve&amp;dopt=Abstract">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&amp;cmd=Retrieve&amp;dopt=Abstract</a> , 1 page.	
	KINOSHITA et al., "Electric cortical stimulation suppresses epileptic and background activities in neocortical epilepsy and mesial temporal lobe epilepsy," Clinical Neurophysiology, Volume 116, 2005, pages 1291-1299, Elsevier Ireland Ltd.	
	KOSSOFF et al., "Effect of an External Responsive Neurostimulator on Seizures and Electrographic Discharges during Subdural Electrode Monitoring," Epilepsia 45(12):1560-1567, 2004, Blackwell Publishing, Inc.	
	LANG, Nicolas et al., "Preconditioning with Transcranial Direct Current Stimulation Sensitizes the Motor Cortex to Rapid-Rate Transcranial Magnetic Stimulation and Controls the Direction of After-Effects," Biol Psychiatry 2004;56:634-639, 2004 Society of Biological Psychiatry.	
	LARSON, John et al., "Reversal of LTP by theta frequency stimulation," Brain Research, 600: pp. 97-102 (1993).	
	LAZAR, M. et al., "White Matter Tractography Using Diffusion Tensor Deflection," Human Brain Mapping, 18:306-321, (2003).	
	L-DOPA dyskinesias, BioChemistry of PD, <a href="http://www.mayo.edu-fdp-pd-info-dyskinesias.htm">http://www.mayo.edu-fdp-pd-info-dyskinesias.htm</a> [Retrieved on 12-22-2005].	
	LUTSEP et al., "Safety of Cortical Stimulation in Patients with Hemiparetic Stroke," Oasis, Online Abstract Submission and Invitation System - Program Planner, International Stroke Conference 2005, 1 pages, American Stroke Association.	
	MANSUR, C.G. et al., "A sham stimulation-controlled trial of rTMS of the unaffected hemisphere in stroke patients," Neurology, Vol. 64, pp. 1802-1804 (2005).	
	MARTIN et al., "Transcranial Magnetic Stimulation as a Complementary Treatment for Aphasia," Semin Speech Language, Vol. 25, pp: 181-191 (2004) Abstract Only- 1 page.	
	MENDONCA, A.C., "Directly applied low intensity direct electric current enhances peripheral nerve regeneration in rats," Journal of Neuroscience Methods, 2003, Vol. 129, pages 183-190.	
	MEYERSON, B.A. et al., "Motor Cortex Stimulation as Treatment of Trigeminal Neuropathic Pain", Acta Neurochirurgica Supplementum, Vol. 58, pp: 150-153 (1993).	
	MISAWA et al., "Low-frequency transcranial magnetic stimulation for epilepsia partialis continua due to cortical dysplasia," Journal of the Neurological Sciences, Volume 234, 2005, Pages 37-39.	
	MONTGOMERY, "Thalamic Stimulation," Neuroscience Pathways, The Cleveland Clinic Foundation, 2 pages.	
	MOTAMEDI et al., "Optimizing Parameters for Terminating Cortical Afterdischarges with Pulse Stimulation," Epilepsia 43(8):836-846, 2002, Blackwell Publishing, Inc.	
	NITSCHKE, Michael A. et al. "Facilitation of Implicit Motor Learning by Weak Transcranial Direct Current Stimulation of the Primary Motor Cortex in the Human," Journal of Cognitive Neuroscience 15:4, pp 619-626, 2003 Massachusetts Institute of Technology.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/731,892-Conf. #4677
				Filing Date	December 9, 2003
				First Named Inventor	W. D. Sheffield
				Art Unit	3766
				Examiner Name	J. L. Reidel
				Attorney Docket Number	337348055US1
Sheet	8	of	10		

		NITSCHKE, Michael A. et al., "Level of action of cathodal DC opographyn induced inhibition of the human motor cortex," December 2, 2002, Clinical Neurophysiology 114 (2003) 600-604.	
		NUDO, Randolph J. et al., "Recovery after damage to motor cortical areas," Current Opinion in Neurobiology, Vol. 9, Issue 6, pp: 740-747, December 1, 1999.	
		PANCHANATHAN, Sethuraman et al., "Rehabilitation of patients with hemispatial neglect using visual-haptic feedback in Virtual reality environment," <a href="http://www.public.asu.edu/~tmcdani-publications.htm">http://www.public.asu.edu/~tmcdani-publications.htm</a> , 5 pages [Retrieved on 12-22-2005].	
		PAULUS, W, "Supplements to Clinical Neurophysiology," Transcranial Magnetic Stimulation and Transcranial Direct Current Stimulation (Supplements to Clinical Neurophysiology; Vol 56), pp 249-254, 2003 Elsevier Science, B.V.	
		PAULUS, Walter, "Toward Establishing a Therapeutic Window for rTMS by Theta Burst Stimulation," Neuron, Vol. 45, pp. 181-183 (January 20, 2005).	
		PENN, Michael, "Stemming Parkinson's," On Wisconsin Alumni Magazine, Summer 2003, <a href="http://www.uwalumni.com-onwisconsin-2003_summer-research.html">http://www.uwalumni.com-onwisconsin-2003_summer-research.html</a> , 1 page [Retrieved on 12-22-2005].	
		POLITIS, M. J., "Mammalian Optic Nerve Regeneration Following the Application of Electric Fields," The Journal of Trauma, November 1988, Vol. 28, No. 11, pages 1548-1552.	
		PRICE, J. et al., "Neurotransplantation in neurodegenerative disease: a survey of relevant issues in developmental neurobiology," Novartis Foundation Symposium 231, 2000, Pages 148-165, Wiley, Chichester, UK.	
		ROBINSON, Kenneth R., "The Responses of Cells to Electrical Fields: A Review," The Journal of Cell Biology, Vol. 101, pages 2023-2027 (December 1985).	
		SCHAEFER, Pamela W. et al., "Assessing Tissue Viability with MR Diffusion and Perfusion Imaging," AJNR, 24: pp.436-443 (March 2003).	
		SCHIENE, Klaus et al., "Neuronal Hyperexcitability and Reduction of GABA-Receptor Expression in the Surround of Cerebral Photothrombosis," Journal of Cerebral Blood Flow and Metabolism, Vol. 16, No. 5, pp. 906-914 (1996).	
		SCHULZ et al., "Localization of Epileptic Auras Induced on Stimulation by Subdural Electrodes," Epilepsia, December 1997, Volume 38, Issue 12, pp. 1321-1329.	
		SCIrun, Scientific Computing and Imaging Institute. <a href="http://www.sofware.sci.utah.edu-scirun.html">http://www.sofware.sci.utah.edu-scirun.html</a> , 2 pages [Retrieved on 7-24-2005].	
		SIOUTOS et al. "Continuous Regional Cerebral Cortical Blood Flow Monitoring in Head-injured Patients, Neurosurgery, Vol. 36, No. 5, May 1995, pages 943-949.	
		STORER et al., "Microiontophoretic application of serotonin (5HT)1B/1D agonists inhibits trigeminal cell firing in the cat," Brain, 1997, Volume 120, Issue 12, pp. 2171-2177, Oxford University Press.	
		STRANGMAN, Gary et al., "A Quantitative Comparison of Simultaneous BOLD fMRI and NIRS Recordings during Functional Brain Activation," NeuroImage, Vol. 17, pp: 719-731 (2002).	
		STRANGMAN, Gary et al., "Factors affecting the accuracy of near-infrared spectroscopy concentration calculations for focal changes in oxygenation parameters," NeuroImage, Vol. 18, pp: 865-879 (2003).	
		STRANGMAN, Gary et al., "Non-Invasive Neuroimaging Using Near-Infrared Light," Biological Psychiatry, Vol. 52, pp: 679-693 (2002).	
		STRENS, Lucy et al., "The Ipsilateral Human Motor Cortex Can Functionally Compensate for Acute Contralateral Motor Cortex Dysfunction," Current Biology, Vol. 13, pp 1201-1205 (July 15, 2003).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/731,892-Conf. #4677	
			Filing Date	December 9, 2003	
			First Named Inventor	W. D. Sheffield	
			Art Unit	3766	
			Examiner Name	J. L. Reidel	
Sheet	9	of	10	Attorney Docket Number	337348055US1

	SUZUKI et al., "Selective Electrical Stimulation of Postganglionic Cerebrovascular Parasympathetic Nerve Fibers Originating from the Sphenopalatine Ganglion Enhances Cortical Blood Flow in the Rat," Journal of Cerebral Blood Flow and Metabolism, May 1990, 10(3):383-91.	
	TAGA, Gentaro et al., "Brain imaging in awake infants by near-infrared optical topography," PNAS, Vol. 100, No. 19, pp:10722-10727 (September 16, 2003).	
	TANG, Cha-Min et al., "Optical Coherence Tomography of the Human Basal Ganglion," Deep Brain Stimulation Consortium Meeting Program Book, September 29-30, 2003, Washington DC.	
	The GES 250 for Dense-Array EEG Research, Electrical Geodesics, Inc., <a href="http://www.egi.com/ges250r_n.html">http://www.egi.com/ges250r_n.html</a> , 3 pages [Retrieved on 8-25-2005].	
	The INVOS Cerebral Oximeter, Somanetics, <a href="http://www.somanetics.net/invos.htm">http://www.somanetics.net/invos.htm</a> , 1 page [retrieved from the internet on 12-22-2005].	
	The National Institutes of Health (NIH) Consensus Development Program, "Surgery for Epilepsy," National Institutes of Health Consensus Development conference Statement, March 19-21, 1990, 16 pages.	
	THEORET, Hugo et al., "Exploring Paradoxical Functional Facilitation with TMS," Supplements to Clinical Neurophysiology, Vol. 56, pp: 211-219 (2003).	
	THOMAS, Carmen et al., "Do Children with aggressive behavior have temporal lobe changes?" Alasbimn Journal, Year 5, No. 19, 8 pages (January 2003).	
	TIMMERMANN, Lars et al., "The cerebral oscillatory network of parkinsonian resting tremor," Brain, Vol. 126, pp: 199-212, (2003).	
	TORONOV, Vlad et al., "Near-infrared study of fluctuations in cerebral hemodynamics during rest and motor stimulation: Temporal analysis and spatial mapping," Medical Physics, Vol. 27, No. 4, pp: 801-815 (April 2000).	
	Tractography, Absolute Astronomy Reference, <a href="http://www.absoluteastronomy.com-encyclopedia-T-Tr-Tractography.htm">http://www.absoluteastronomy.com-encyclopedia-T-Tr-Tractography.htm</a> , 2 pages [Retrieved on 7-24-2005].	
	TSUBOKAWA, T. et al., "Chronic Motor Cortex Stimulation for the Treatment of Central Pain," Acta Neurochirurgica, Supplementum. Vol. 52, pp: 137-139 (1991).	
	TSUBOKAWA, T. et al., "Chronic Motor Cortex Stimulation in Patients with Thalamic Pain," J. Neurosurg 78:393-401, (March 1993).	
	TSUBOKAWA, T. et al., "Treatment of Thalamic Pain by Chronic Motor Cortex Stimulation", PACE, Vol. 14, pp: 131-134 (January 1991).	
	TUCH, D. et al., "Conductivity Tensor Mapping of the Human Brain Using Diffusion Tensor MRI," Neurobiology, Vol. 98 No. 20, pp. 11697-11701 (September 25, 2001).	
	VANDERKOOY et al., "Resolution Below the Least Significant Bit in Digital Systems with Dither," JAES, March 1984, Volume 32, Number 3, pp. 106-113.	
	VELASCO et al. "Absolute and Relative Predictor Values of Some Non-Invasive and Invasive Studies for the Outcome of Anterior Temporal Lobectomy," Science Direct, Volume 31, Issue 1, January-February 2000, pages 62-74, Elsevier Science, Inc.	
	VELASCO et al., "Acute and Chronic Electrical Stimulation of the Centromedian Thalamic Nucleus: Modulation of Reticulo-Cortical Systems and Predictor Factors for Generalized Seizure Control," Archives of Medical Research, Volume 31, 2000, Pages 304-315, Elsevier Science, Inc.	
	VELASCO et al., "Electrical Stimulation for Epilepsy: Stimulation of Hippocampal Foci," Stereotactic and Functional Neurosurgery, Vol. 77, 2001, Pages 223-227.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/731,892-Conf. #4677
				Filing Date	December 9, 2003
				First Named Inventor	W. D. Sheffield
				Art Unit	3766
				Examiner Name	J. L. Reidel
Sheet	10	of	10	Attorney Docket Number	337348055US1

	VELASCO et al., "Subacute and Chronic Electrical Stimulation of the Hippocampus on Intractable Temporal Lobe Seizures: Preliminary Report," Archives of Medical Research, Volume 31, 2000, Pages 316-328, Elsevier Science, Inc.	
	VELASCO et al., "Subacute Electrical Stimulation of the Hippocampus Blocks Intractable Temporal Lobe Seizures and Paroxysmal EEG Activities," Epilepsia, Volume 41, No. 2, 2000, Pages 158-169, Lippincott Williams & Wilkins, Philadelphia.	
	WAXMAN et al., "The Interictal Behavior Syndrome of Temporal Lobe Epilepsy," Arch Gen Psychiatry, Volume 32, Dec. 1975, Pages 1580-1586.	
	WEINAND et al., "Cerebral blood flow and temporal lobe epileptogenicity," J Neurosurg, Vol. 86, February 1997, pages 226-232.	
	WEINAND et al., "Cerebral blood flow and temporal lobe epileptogenicity," Neurosurgical Focus, November 1996, Volume 1, Number 5, AANS.ORG, <a href="http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp">http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp</a> , 17 pages.	
	WEINAND et al., "Long-term ictal monitoring with subdural strip electrodes: prognostic factors for selecting temporal lobectomy candidates," J Neurosurg, Volume 77, 1992, Pages 20-28.	
	WEINAND et al., "Surface cortical cerebral blood flow monitoring and single photon emission computed tomography: prognostic factors for selecting temporal lobectomy candidates," Seizure, Vol. 3, 1994, Pages 55-59.	
	WEINAND et al., "Targeted Subthreshold Cortical Stimulation for Recovery of Motor Hand Function following Hemiparetic Stroke," Abstract: 2005 April 18, AANS.org, <a href="http://www.aans.org/Library/Article.aspx?ArticleId=24934">http://www.aans.org/Library/Article.aspx?ArticleId=24934</a> , 2 pages.	
	WEINAND, Martin E. et al., "Cerebral blood flow and temporal lobe epileptogenicity," Retrieved from the Internet on December 22, 2005, <a href="http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp">http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp</a> , 13 pages.	
	WOODBURY, D. et al., "Adult Rat and Human Bone Marrow Stromal Cells Differentiate Into Neurons," Journal of Neuroscience Research, 2000, Volume 61, Pages 364-370, Wiley Interscience, New York, NY.	
	YAMAMOTO et al., "Low-frequency Electric Cortical Stimulation Has an Inhibitory Effect on Epileptic Focus in Mesial Temporal Lobe Epilepsy," Epilepsia, Volume 43, No. 5, 2002, Pages 291-295, Blackwell Publishing, Inc.	
	YOKOH, Arika et al., "Intermittent versus continuous brain retraction," Journal of Neurosurgery, Vol. 58, pp: 918-923 (June 1983).	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--